

SLOT FOR DECADE BAND TAPERED SLOT ANTENNA,
AND METHOD OF MAKING AND CONFIGURING SAME

ABSTRACT OF THE DISCLOSURE

5 An antenna apparatus (10) includes an antenna
element (12, 412, 512) that has conductive material with
a recess therein. The recess includes a balun hole (36,
536), and a tapered slot (37, 537) communicating at its
narrow end with the balun hole. The balun hole is
approximately rectangular, has a peripheral edge defined
by conductive material, and contains air. The tapered
slot has a shape which is optimized as a function of
10 factors that include the balun hole design. Each slot
edge follows a predetermined curve other than a first-
order exponential curve.

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